



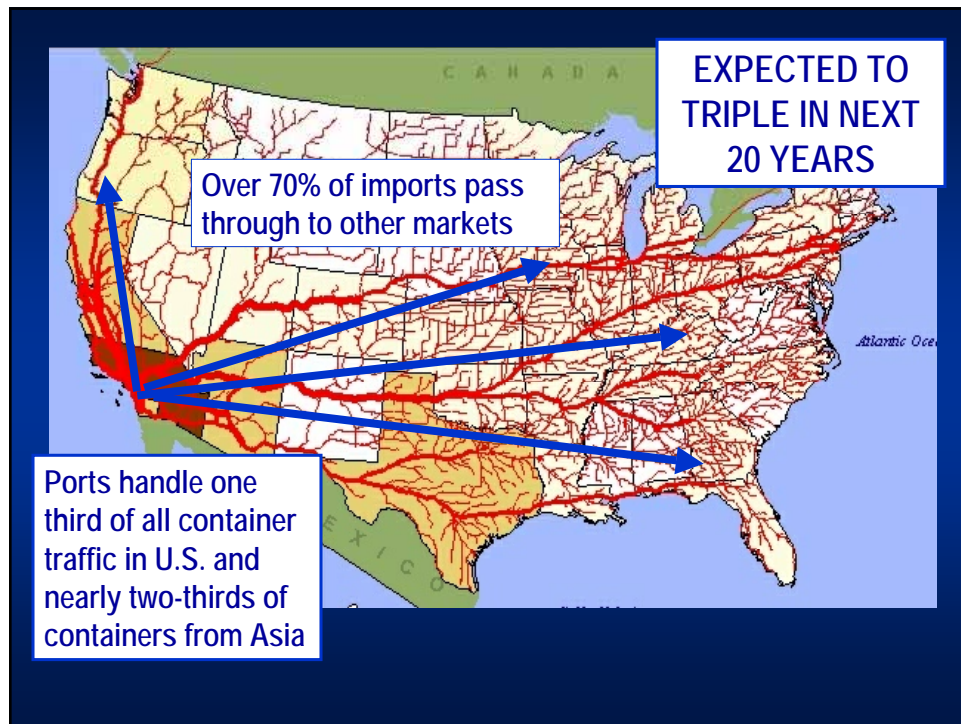
Can Moving These Faster and More Safely Save an Industry, an Economy, and our Children?

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LA/Long Beach Port Complex is Largest in the U.S. and 5th in the World



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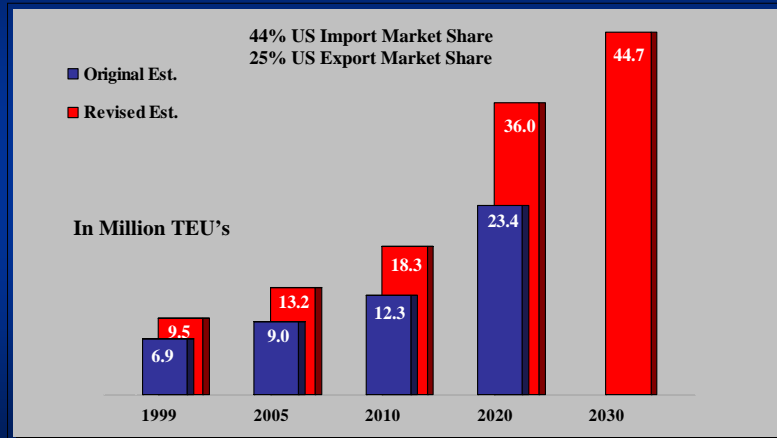
Shares of Asia – U.S. Containerized Trade 2003

Port Region	Imports	Exports
LA-Long Beach	60.5%	39.7%
Other US West Coast	16.1%	30.8%
US Gulf + East Coasts	23.4%	29.5%

Note: Shares measured on a TEU basis

Source: PIERs, courtesy of MARAD

San Pedro Bay Projected Container Growth



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Why Are These Sister Ports So Popular?



Los Angeles



Long Beach

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They Can Handle These



8000-Container Panamax Ships

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They Have State-of-the-Art On-Dock Facilities



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Inter-Modal Transfer and Distribution Facilities



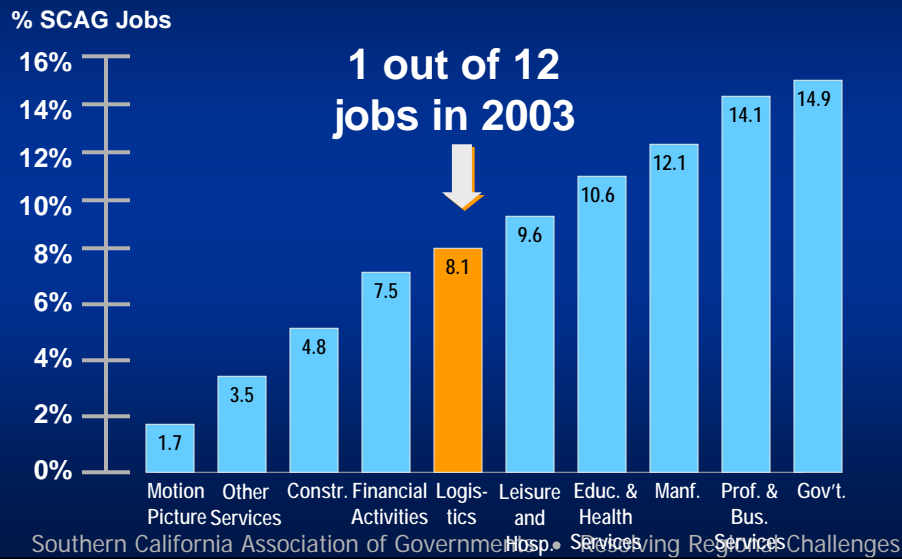
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That Currently Employ Over 500,000 Southern Californians

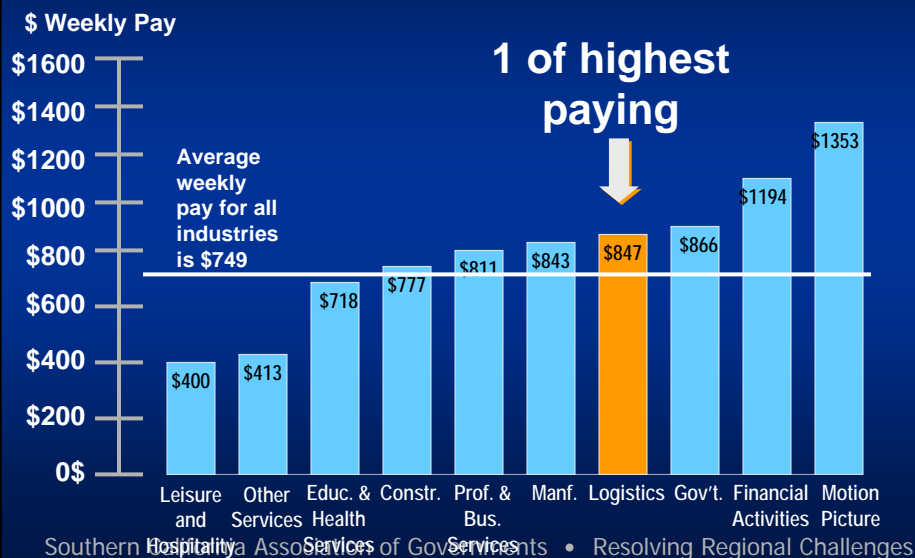


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The Logistics Industry Provides Jobs to 8% of Southern Californians



And Those Jobs Pay Well



What Does the Logistics Infrastructure and Work Force in the Region Offer Shippers That Other Destinations Don't?

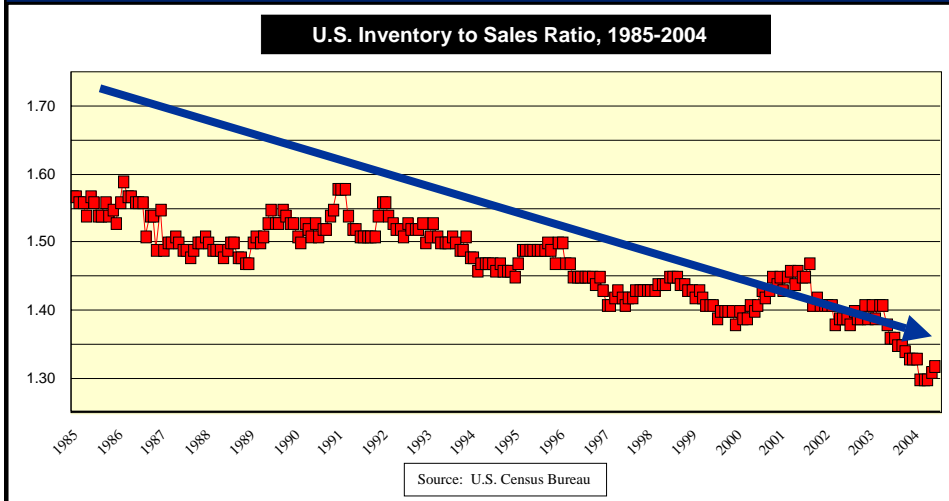
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Exactly What Shippers Want



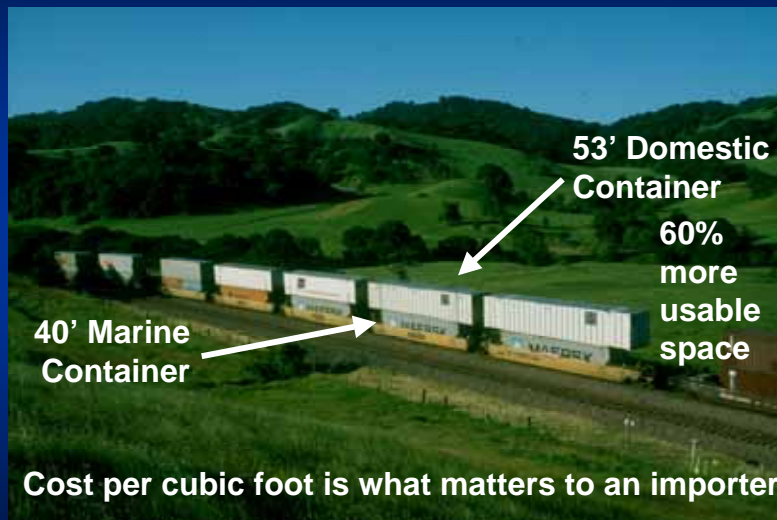
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Just In Time Inventory Trend



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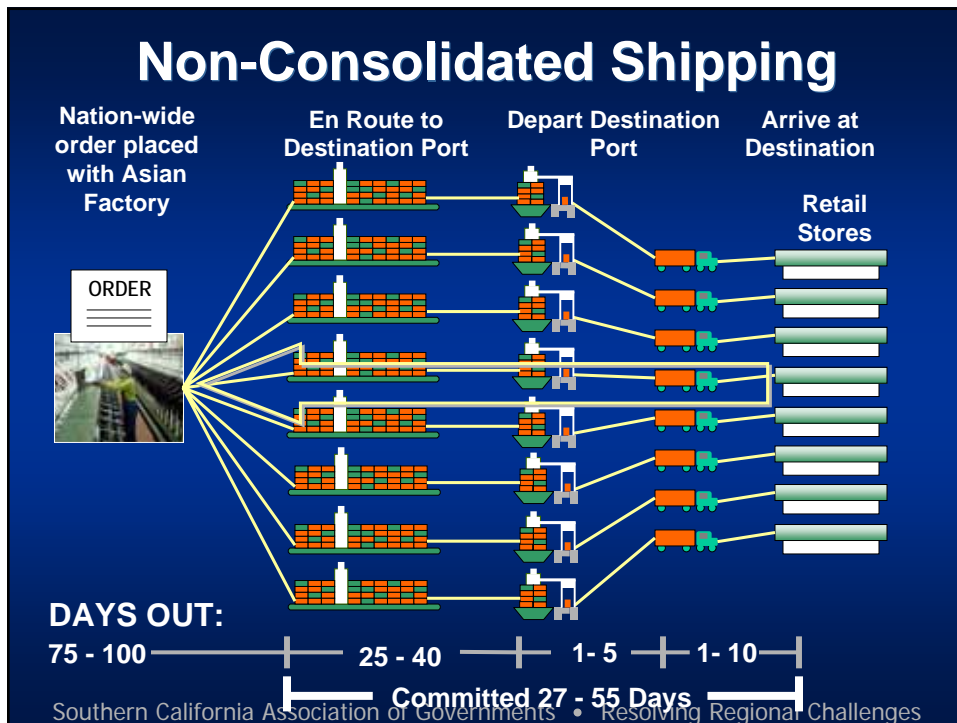
Shipping Container Trend



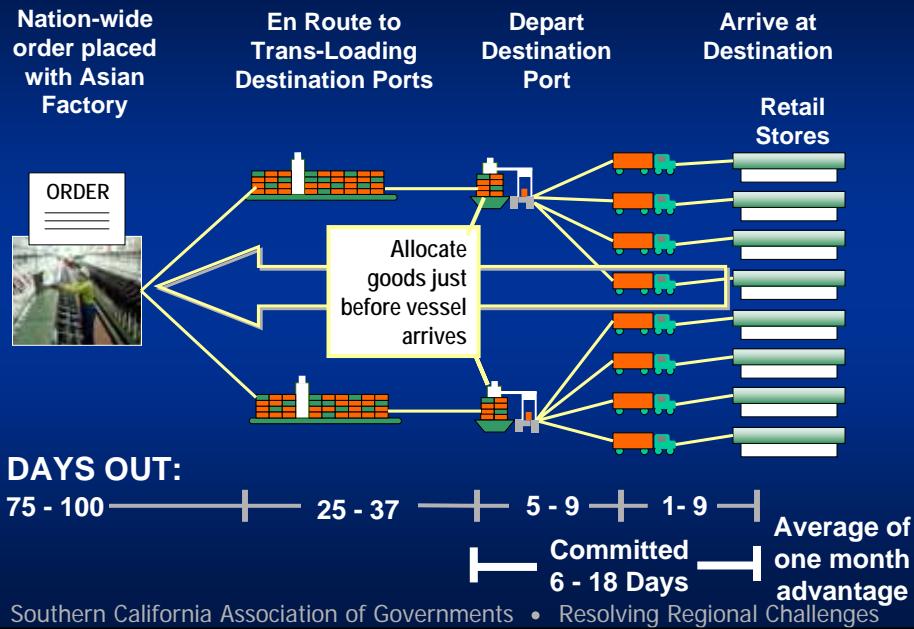
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Consolidation & Trans-Loading Produce Both Cost and Time Savings, Making “Just-In-Time” Strategies Achievable

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Consolidated & Trans-Loaded



The Benefit to Shippers

The trans-loading of weekly shipments from Asia affords large, nation-wide retailers an 18-20% reduction in their total pipeline plus safety stock inventory compared to direct shipping from Asia.

Assuming a 6% average error in nationwide one-week-ahead sales forecasts

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The Benefit to the Region

**The sustenance and growth of the
Logistics Industry, an industry
noteworthy for the good pay and upward
mobility opportunities available to a
growing blue collar labor force**

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Just a Couple of Problems

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Quality of Life Crisis



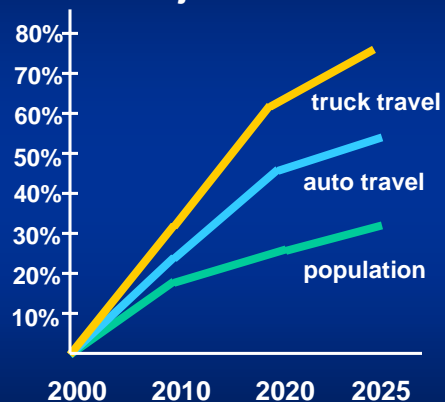
- The region's commuters now endure 136 hours of delay annually
- Further gridlock will detrimentally impact the region's, as well as the nation's economic well-being.

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Highway Congestion



Projected Growth



Worst in nation since 1982

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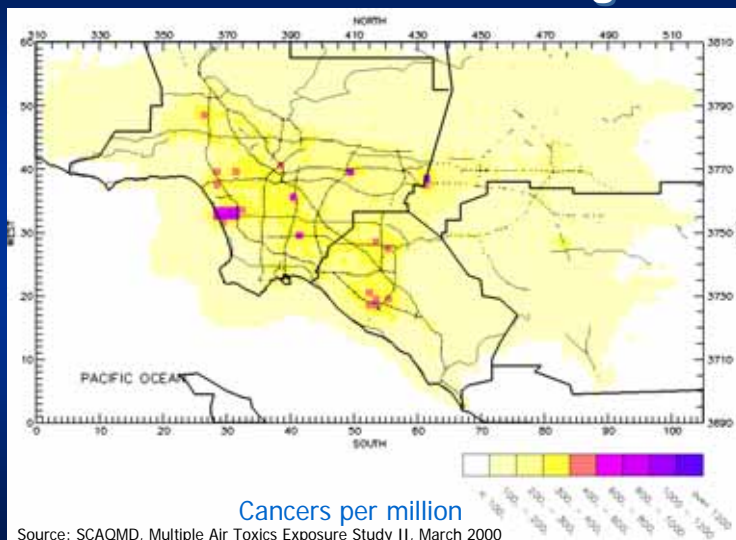
Air Pollution



- Progress has stalled and diesel emissions from ships, locomotives and port complex are projected to increase
- The mega-region continues to have the worst air quality in the U.S.

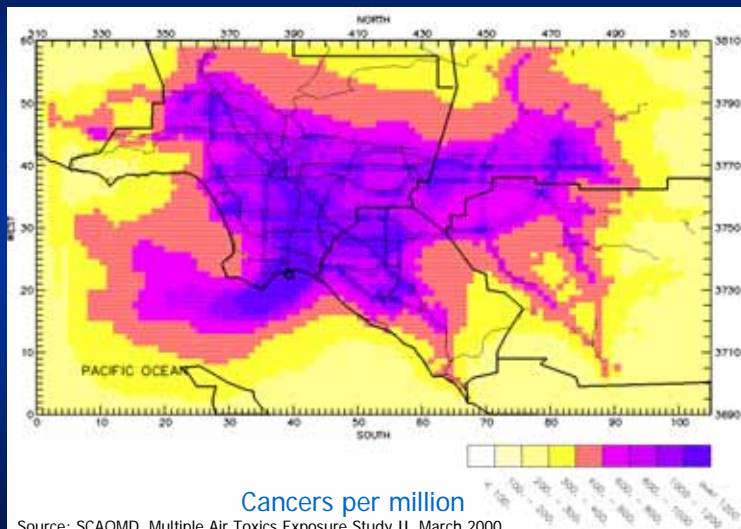
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Estimated Risk of Cancer from Airborne Toxics: Excluding Diesel



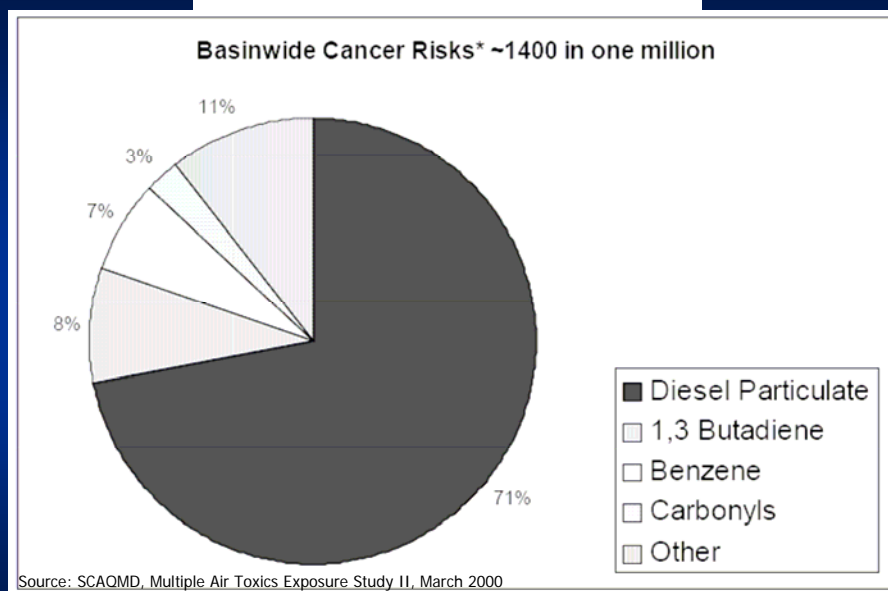
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Estimated Risk of Cancer from Air Toxics: All Emission Sources



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Major Pollutants Contributing to Cancer Risk In the South Coast Air Basin



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Not Nearly Enough Federal and State Funds to Fix It



- **Dramatic growth in traffic is running head-long into limited transportation funding and high infrastructure improvement costs.**

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If users of the system helped to build congestion-reducing infrastructure...



Would it make business sense for them to invest

- or -



Would they take their business elsewhere

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Factors to Consider

- **Trade-off Between Inventory Cost and Transportation Cost**
 - Inventory cost favors West Coast ports
 - Shipping cost favors all-water
- **Big Box Store Thinking**

<u>Merchandise</u>	<u>Cheapest Shipping Method</u>
Low Value (\$13/cu.ft.)	Direct Shipping
Moderate Value	Trans-loading at Multiple Ports
High Value (\$27/cu.ft.)	Trans-Loading at Single Port

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Port & Modal Elasticity Study Model

- **USA divided into 21 destination regions served by 10 ports of entry**
 - Volume for 102 Asian importers distributed among all regions proportional to purchasing power
- **Import volumes allocated among ports and modes as to minimize total transportation and inventory costs for each importer**

Study Conducted by Leachman and Associates LLC - Sept. 2005

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Two “What-If” Scenarios

As-Is Scenario

No investment in regional congestion relief

Congestion Relief Scenario

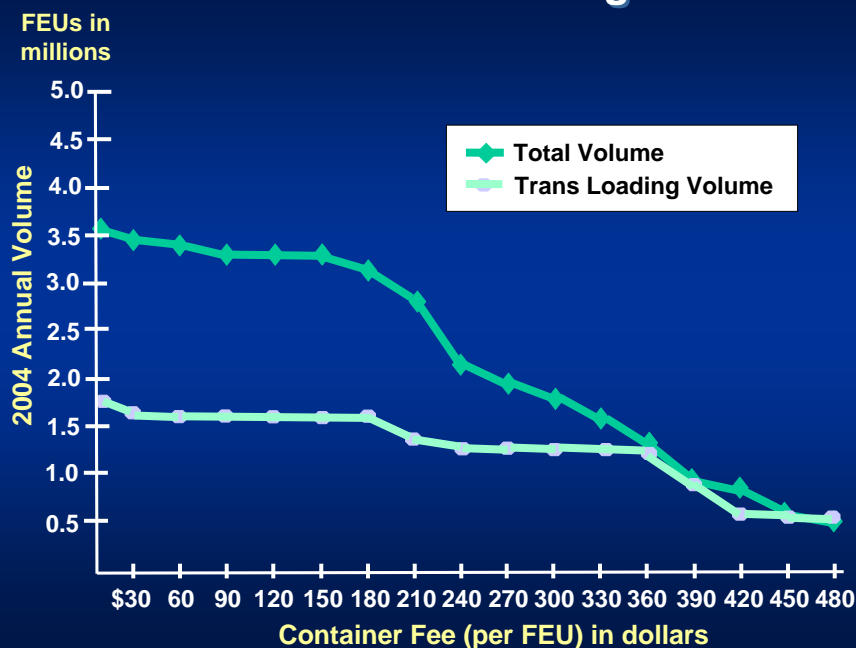
Investment in goods movement infrastructure to guarantee reduction in rail and truck transit time to trans-loading facilities

Key Study Finding:

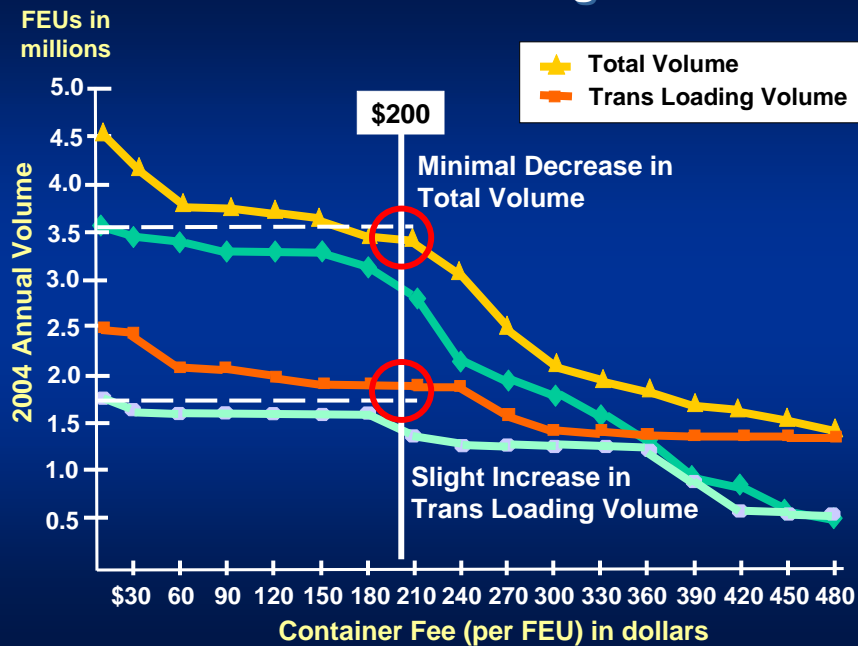
Shippers are more sensitive to congestion than to the cost of transportation

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Scenario #1: Without Congestion Relief



Scenario #2: With Congestion Relief



The Proposed System



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The Physical Options



Elevated Roadway



Dedicated right-of-ways

**What's the Value to
Shippers of More
Speedy and Reliable
Delivery?**

Premise

1. **Infrastructure improvements will reduce transit time for shippers and improve efficiency and reliability.**
2. **Reliability has a dollar value to shippers.**
3. **The value of the time savings is significantly greater than the costs to achieve the time savings.**

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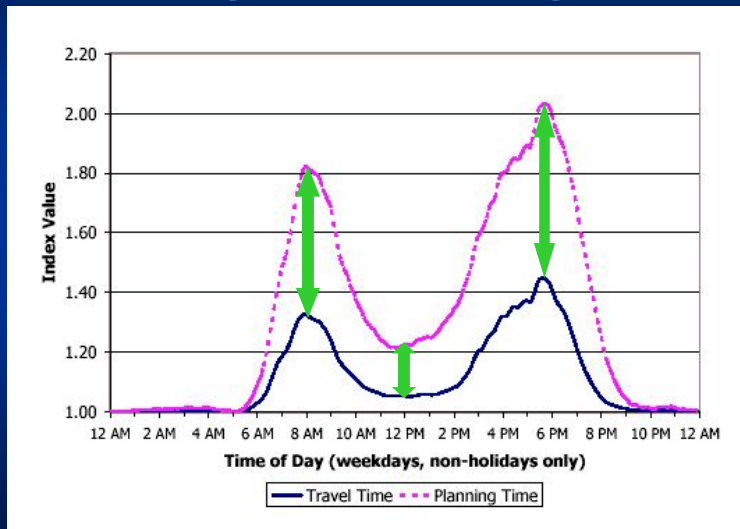
Goods Movement Performance Measures

- **Speed**
 - **Trucking Industry Value-of-Time:**
\$25 to \$200 per hour depending on cargo
 - *Analysis Assumption:*
\$73 per hour (2005 \$)
- **Reliability**
 - **Unexpected delays can increase Value-of-Time by 50 to 250 percent**

FHWA Freight Management and Operations: Measuring Travel Time in Freight-Significant Corridors, <http://www.ops.dot.gov/freight/time.htm>

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Planning Time Index by Time-of-Day



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Value Ratios A.M. Peak Port to Warehouse Districts

Warehouse District		Travel Minutes Saved	Buffer Minutes Saved	Total Minutes Saved	Value	Toll Cost	VALUE RATIO
Downtown	To	26	59	85	\$103	\$17	6.1
	From	30	68	97	\$118	\$17	7.1
Ontario	To	62	130	192	\$233	\$32	7.2
	From	88	210	298	\$361	\$32	11.2
Victorville	To	96	189	285	\$345	\$64	5.4
	From	128	276	405	\$490	\$64	7.6

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Value Ratios Midday Port to Warehouse Districts

Warehouse District		Travel Minutes Saved	Buffer Minutes Saved	Total Minutes Saved	Value	Toll Cost	VALUE RATIO
Downtown	To	19	65	84	\$102	\$17	6.1
	From	20	63	83	\$100	\$17	6.0
Ontario	To	55	177	232	\$280	\$32	8.7
	From	64	211	275	\$333	\$32	10.3
Victorville	To	82	247	329	\$398	\$64	6.2
	From	100	304	404	\$489	\$64	7.6

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\$1 Invested = \$5 - \$11 Return

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Other Potential Benefits

A Dedicated System Offers the Potential for:

- The operation of LCVs resulting in fewer total trips, less vehicle miles traveled and lower emissions
- The introduction and proliferation of technological advances in engine design and alternative fuels

Rail Capacity Improvements



Value Assessment - Rail

LA to Colton Crossing

	Average Delay per Freight Train (minutes)	% Change	Average Flow Time (minutes)	% Change
2010 Baseline *				
BNSF	206.3		299.5	
UP	196.9		284.5	
2025 with Track Improvements and Alternative Routing				
BNSF	29.5	- 86%	123.8	- 59%
UP	14.4	- 93%	98.8	- 65%

* By 2025, delay is infinite since nothing will be moving

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Preliminary Financing Options

All estimates in 2005\$

Project	Capital Cost	Fee Structure	Appx. Fee Range
No Project	\$0	NA	NA
Truck Lanes	\$16.5B	Container Fee + Tolls	\$60/FEU to \$70/FEU + \$0.86/mile (Level debt @ 5% interest, 30Yr & 35Yr maturities)
Rail Capacity Improvements	\$3.4B	Container Fee (For rail analysis only—FEU est. based on avg. daily trains—captures int'l & domestic east-west movements)	\$15/FEU to \$30/FEU (Low assumes tax credit instrument & high assumes 5% interest ascending debt; 20Yr maturity)
Total Hwy & Rail System	\$26B	Container Fee + Tolls	\$120/FEU to \$130/FEU + \$0.86/mile (Level debt @ 5% interest, 30Yr, 35Yr & 40Yr maturities; also tax credit & ascending debt for rail component)
Total Hwy & Rail System & Env. Mitigation	\$36B	Container Fee + Tolls	\$160/FEU to \$170/FEU + \$0.86/mile (Level debt @ 5% interest, 30Yr, 35Yr & 40Yr maturities; also tax credit instrument & ascending debt for rail component)

Fee range estimates are within \$200/FEU import threshold
per elasticity study (8-2005); no charge on exports/empties.

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The Outcomes

- The region gains in logistics (and construction) employment
- We avert gridlock and improve safety for the driving public
- We can clean up the air and improve public health by financing mitigation along with infrastructure
- Shippers get a great return on investment

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**Moving These
Faster and
More Safely
Can Save an
Industry, an
Economy,
and our
Children**

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